

## Freight Advisory Committee Meeting #3

October 29, 2014





## **Meeting Purpose**

- Interactive review of finalized technical analysis of freight modes and forecasts
- Discuss and receive input on developing an Alaska Freight Network and Freight Performance Measures
- Discuss and receive input on larger LRTP plan strategies, policies, and actions related to freight

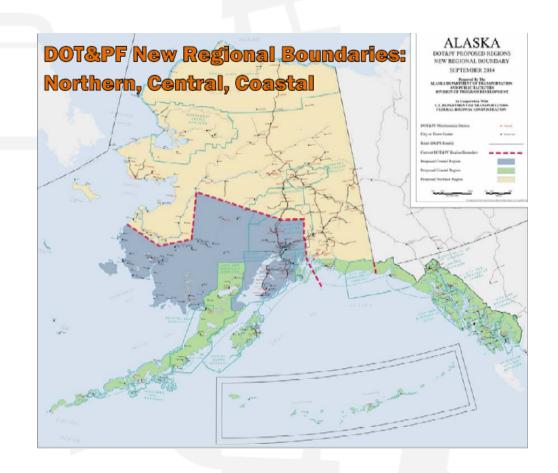


## Agenda

- Welcome
  - Safety Moment and Introductions
  - Regional Boundaries Update
  - Update on LRTP Process
  - Review of May 2014 FAC Meeting
- Interactive Discussion on Technical Analysis
  - Modal Systems and Risk-Sensitive Forecasts
- Workshop #1: Freight Network/Performance Measures
- Workshop #2: Overall Plan Strategies, Policies, Actions
- Wrap Up

### Regional Boundaries Update

- Expansion of Southeast region to include more coastal areas – "Southcoast region (SR)"
- Key factors for change
  - Group communities with similar transportation systems and priorities
  - Help balance work loads
  - Anchorage/Mat-Su population
    - Increase by 72%\*
  - MAP-21 NHS focus
    - Few miles in SE region





## **About the Freight Plan Element**

### Intended to:

- Tell the story of freight in Alaska and explain why it matters
  - Transportation, economy, futures
  - Different plans, initiatives, and data
  - All modal networks and facilities
- Opportunity to frame a statewide vision
  - Integration of transportation and economic development
  - "Stewardship of the whole"
- Highlight critical issues, choices, and outcomes for Alaska
  - Programs, policies, projects
  - Roles of DOT&PF, other agencies and modes, private sector
- Inform the LRTP, regional, and local planning
  - Also satisfies MAP-21 guidance for state freight plans



## **FAC Input**

- FAC Meeting #2 (May 2014)
  - Discussion topics
    - Use of the freight element
    - Freight data and forecasts
    - Modal issues, needs, opportunities
  - Workshops
    - Alaska freight scenarios
      - Variables, worst case, best case
    - Preliminary freight goals, strategies, and actions
- Today's program
  - Build on previous FAC input
  - Address remaining freight plan components



## **Progress on Freight Plan Components**

State Freight Plans <u>Must</u> Address (from MAP-21 Legislation)	State Freight Plans <u>Should</u> Address (from USDOT Guidance)
Support for national freight goals	Economic context
Policies and strategies	Assets, Condition, and Performance
Trends, needs, issues	Freight Forecasts
Bottlenecks and improvements	Strengths, Weaknesses, Opportunities, Threats (SWOT)
Performance measures	Investment Process and Implementation

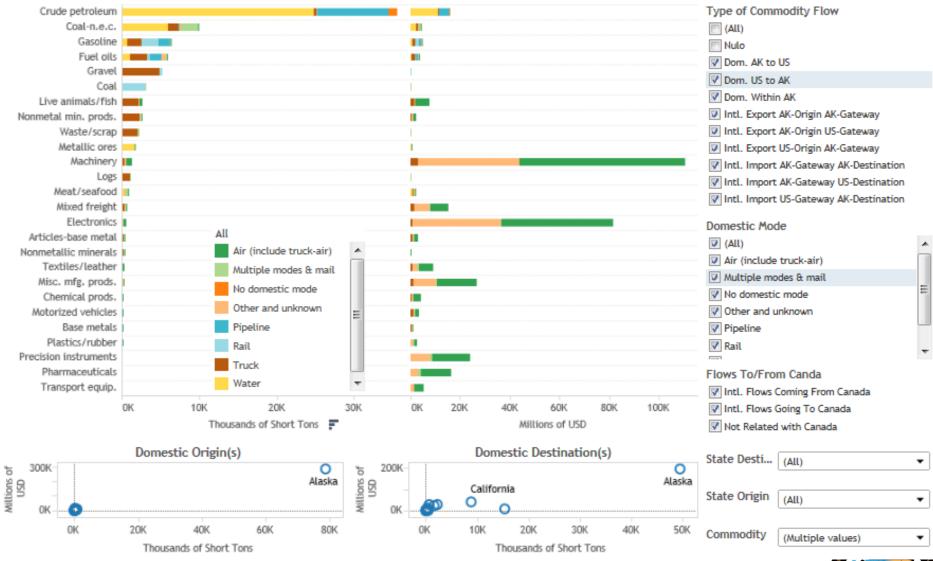
- Previous FAC meetings presented data on economy, freight flow data, and trends/needs/issues, and obtained FAC ideas on issues, needs, planning scenarios, and goals
- Today's interactive discussion and workshops advance work on <u>modal</u> <u>system performance</u>, <u>risk-sensitive freight forecasts</u>, <u>strategies/policies/actions</u>, and <u>implementation</u> of key freight actions
- At the end of the day, we will have addressed everything except relation to national freight goals and investment process

### **Modal Systems**

- Goal: make data on modal assets more accessible and useful in continuous planning, performance measurement, and prioritization
- Approach: web-based repository
  - Retrieved, displayed, and queried via free software interface
  - Only limited by disclosure terms of source data
- Example applications:
  - Freight Analysis Framework commodity flow data
  - FHWA travel time data
  - Airport and port locations, volumes, commodities

## **Commodity Flows**

### Year 2011 Data from Freight Analysis Framework

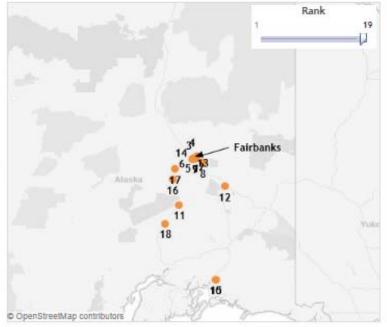


## **Highest Truck AADT Locations**

### Northern Region

#### Northern Region 2012

	Rank Label	Truck AADT 20	Truck % in 2012
Steese Expressway South of Johansen Expre	1	1,624	7%
Steese Expressway North of Farmers Loop	2	1,168	8%
Parks Highway at Chena Bridge	3	960	6%
Peger Road at Chena Bridge	4	954	6%
Parks Highway at Lathrop Street	5	945	7%
Airport Way between Lathrop Street and Wi	6	760	4%
Airport Way between Steese Expressway an	7.	720	4%
Richardson Highway at Moose Creek	8	719	9%
College Road at Bentley Mall	9	480	3%
Richardson Highway at Valdez	10	470	10%
Parks Highway at MP 216 (230 used for AADT)	- 11	429	17%
Richardson Highway South of Fort Greely En	12	426	22%
Steese Highway AVC	13	420	14%
Chena Pump Road between Ludecker Road	14	371	6%
Richardson Highway at Valdez Scalehouse (	15	299	8%
Parks Highway at Rex Bridge (Jack Coghill)	16	271	21%
Parks Highway at Nenana	17	261	18%
Parks Highway at Little Coal Creek	18	230	18%
Richardson Highway South of Quartz Lake R	19	226	19%
Richardson Highway at Birch Lake	20	203	17%
Ballaine Road North of Farmers Loop Road	21	202	4%
Steese Highway North of Fox	22	198	11%
Valdez Airport Road North of Richardson Hi	23	196	12%
Chena Hot Springs Road East of Nordale	24	185	6%
Glenn Highway at Nelchina Maintenance Ca	25	176	22%



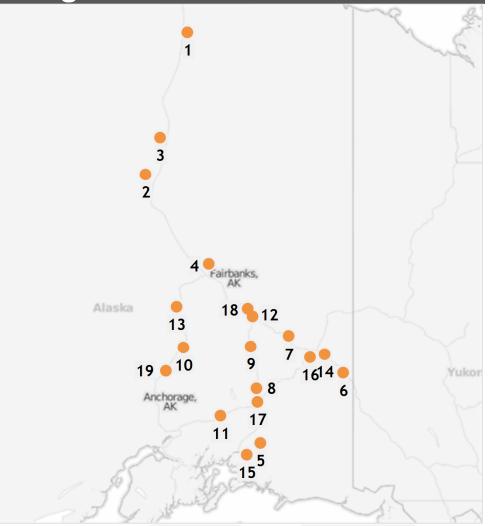


# Highest Truck Share of AADT

Northern Region

#### Northern Region

	Rank Label	Truck % in 2012	Truck AADT 2012
Dalton Highway North of Happy Valley	1.0	82%	86.1
Dalton Highway at Prospect Creek	2.0	67%	110.6
Dalton Highway North of Koyukuk River	3.0	54%	89.1
Elliott Highway at Willow Creek	4.0	35%	169.8
Richardson Highway at Ernestine	5.0	28%	117.6
Alaska Highway at Gardiner Creek	6.0	26%	80.6
Alaska Highway at Chief Creek	7.0	24%	72.0
Richardson Highway at Sourdough Creek Bridge	8.0	24%	78.0
Richardson Highway at Trims Camp	9.0	24%	76.8
Denali Highway East of Parks Highway	10.0	23%	
Glenn Highway at Nelchina Maintenance Camp	11.0	22%	176.0
Richardson Highway South of Fort Greely Entrance	12.0	22%	425.7
Parks Highway at Rex Bridge (Jack Coghill)	13.0	21%	270.9
Alaska Highway AVC	14.0	20%	114.0
Richardson Highway at MP 15 (River Upper Crossing)	15.0	20%	89.0
Tok Cutoff at MP 119 AVC	16.0	20%	77.0
Richardson Highway at Gulkana	17.0	19%	171.0
Richardson Highway South of Quartz Lake Road	18.0	19%	226.1
Parks Highway at Little Coal Creek	19.0	18%	230.4
Parks Highway at Nenana	20.0	18%	261.0





## **Highest Truck AADT Locations**

### Central Region

Central	Region	2012
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	Rank Label	Truck AADT	Truck % 2012
Seward Highway - South of 76th Ave (WIM)	1	3,101	7
Minnesota Drive, Anchorage - North of Dimond	2	2,294	6
Glenn Highway - At Eklutna Flats	3	1,797	6
Seward Highway - North of Bird Creek	4	1,481	17
Minnesota Drive, Anchorage - At Chester Creek	5	1,366	4
Tudor Road, Anchorage - West of Patterson Stre	6	1,049	4
Sterling Highway - Btwn Soundview Ave & Tho	7	1,035	12
Parks Highway - At Milepost 64	8	1,035	17
Seward Highway - North of Portage Glacier Rd	9	979	12
Ocean Dock Road, Anchorage - Port of Anchora	10	942	48
Seward Highway - At Bertha Creek Bridge	11	936	14
Knik Goose Bay Road, Wasilla - Btwn Hollywoo	12	797	7
Old Seward Highway, Anchorage - Btwn Hamilto	13	790	8
Dimond Boulevard, Anchorage - West of Arctic	14	788	3
International Airport Road, Anchorage - West of	15	779	5
Sterling Highway - Btwn Roger's Loop & Diamo	16	758	13
Kenai Spur Road - West of Beaver Loop Rd	17	740	8
Sterling Highway - East of Soldotna	18	718	8
Seward Highway - At Potter Marsh	19	712	8
Sterling Highway - Btwn Bean Creek Rd & Quart	20	692	13
Parks Highway - North of Talkeetna Spur Rd	21	687	22
Mountain View Drive, Anchorage - West of Park	22	666	6
Bridge Access Road, Kenai - North of Kalifornsk.,	23	653	6
Eagle River Loop, Eagle River - North of Eagle R	24	642	8
Sterling Highway - At Milepost 127	25	621	15
Whitney Road, Anchorage - 1/2 Way Btwn North	26	620	32
Elmore Road, Anchorage - Btwn 84th Ave & Cov	27	609	4
Main Street, Wasilla - North of Herning Ave	28	600	6
Dimond Boulevard, Anchorage - Btwn Sand Lak	29	588	12
Raspberry Road, Anchorage - Btwn Changepoin	30	548	6





## **Highest Truck Share of AADT**

### Central Region

#### Central Region

	Rank Label	Truck % 2012	Truck AADT 2012
Ocean Dock Road, Anchorage - Port of Anchorage (	. 1	48	942
Whitney Road, Anchorage - 1/2 Way Btwn North C	. 2	32	620
Old Int'l Airpot Road, Anchorage - Btwn Aircraft Dr	. 3	26	482
Long Lake Road, Mat-Su - 1.50 Miles West of Parks	. 4	25	180
Parks Highway - North of Talkeetna Spur Rd	5	22	687
Glenn Highway - At Milepost 117	6	21	335
Parks Highway - North of Milepost 116	7	19	375
Glenn Highway - At Milepost 99	8	19	350
Eklutna Village Road, Eklutna - Btwn NB & SB Ramp	9	18	157
Glenn Highway - At Milepost 76	10	18	371
Parks Highway - Btwn Susitna Rv & Petersville Rd	11	17	382
Parks Highway - At Milepost 64	12	17	1,035
Seward Highway - North of Bird Creek	13	17	1,481
Parks Highway - At Willow	14	16	464
Petersville Road, Petersville - At Milepost 5	15	16	36
Sterling Highway - At Milepost 127	16	15	621
Big Lake Road, Houston - West of Hibbard Rd	17	15	215
Portage Glacier Road, Portage - East of Seward Hwy	18	14	144
East End Road, Homer - Just Past McNeil Canyon El	. 19	14	192
C Street North, Anchorage - Btwn 1st & 2nd Ave	20	14	373
Seward Highway - At Moose Pass	21	14	250
Seward Highway - At Bertha Creek Bridge	22	14	936
Glenn Highway - At Milepost 63	23	14	360
Glenn Highway - South of Kings River	24	13	188
Sterling Highway - At Cooper Landing	25	13	410

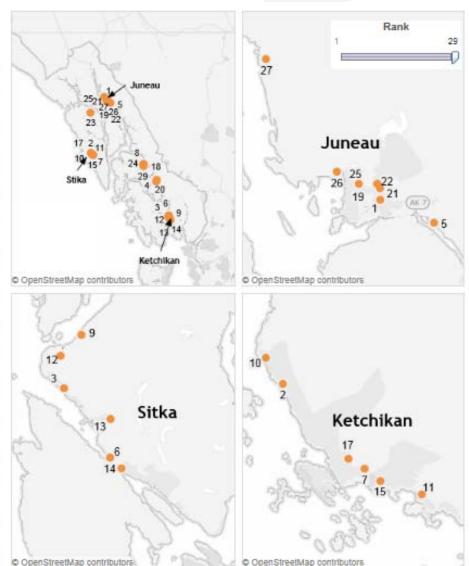


## **Highest Truck AADT Locations**

### Southeast Region

Southeast Region 2003 - 2011

	Rank	Truck AADT	Truck %
Egan Drive @ Sunny Pt Yandukin	1	1,773	6
Halibut Pt. Road @ Harbor Mt. Rd - Cascad	2	1,325	13
N. Tongass Hwy @ Beechwood Dr Pond R	3	1,246	13
Zimovia Hwy. @ Pat Creek - End	4	1,156	58
Egan Drive @ McNugget - Yandukin	5	1,093	4
N. Tongass Hwy @ Carlanna Creek Br Sh	6	1,083	11
Sawmill Ck. Road @ Lake - Jeff Davis	7	1,060	12
Nordic Dr. @ Sing Lee Alley - Ferry Term	8	1,051	15
N. Tongass Hwy @ 1st waterfall Cr End	9	985	10
Halibut Pt. Road @ Granite Creek Harbor	10	876	8
Sawmill Ck. Road @ Thimbleberry Creek	11	834	9
N. Tongass Hwy @ N. Point Higgins - Big Tu	12	806	9
N. Tongass Hwy @ Ward Lake Rd Mill Ent.,	13	725	7
N. Tongass Hwy @ Rose's Caboose	14	588	6
Sawmill Ck. Road @ USPS - Rookies Night C	15	495	6
Kaltian Ave. @ H.P.R Thompson Harbor	16	414	9
Lake St. @ Lake Street	17	366	4
Haugen Dr. @ Mitkof Hwy 6th Street	18	355	11
Riverside Dr. @ Vintage - James Blvd.	19	353	9
Zimovia Hwy. @ Wrangell Institute - Shoem	20	328	16
Mendenhall Blvd. @ Mendenhall Loop - End	21	327	9
Riverside Dr. @ Vintage - James	22	306	7
Hoonah Airport Rd @ Ferry - Seaplane Float	23	303	21
Haugen Dr. @ 6th St Hammer	24	282	8
Glacier Highway - Egan @ Engineers Cutoff	25	234	12
Glacier Highway - Egan @ Waydelich Cr Br	26	222	12
Glacier Highway - Egan @ Dotson's Landing	27	220	10
Katlian Ave. @ Thompson Harbor - Cold St	28	197	5
Mitkof Hwy. @ Swan Observatory - Crystal	29	197	18
N. Douglas Hwy @ Fish Creek Bridge - Boat	30	192	19





## **Highest Truck Share of AADT**

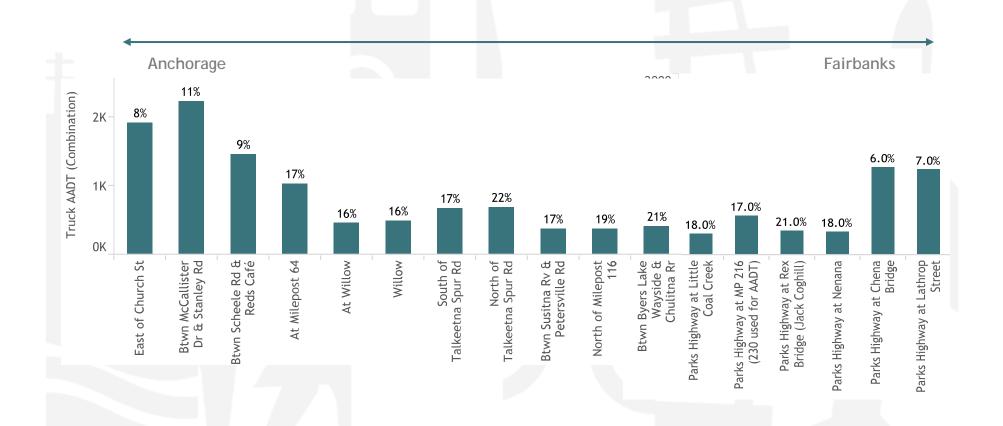
### Southeast Region

#### South East Region 2003 - 2011

	Rank	Truck %	Truck AADT
Zimovia Hwy. @ Pat Creek - End	1	58	1,156
Salmon River Rd @ Hyder - Canadian Customs	2	53	0
Klondike Hwy @ Sanitorium Rd U.S. Customs	3	33	180
Salmon River Rd @ North City Limits	4	29	0
Roosevelt Dr. @ Franklin - Jct. w/ S. Tongass	5	28	0
Klondike Hwy @ 8th - 12th St	6	26	140
Haines Lutak Rd @ Ferry - Front St.	7	25	0
Klondike Hwy @ 22nd - Dyea Rd.	8	24	133
Klondike Hwy @ Dyea Rd Sanitarium Rd.	9	22	122
Hoonah Airport Rd @ Ferry - Seaplane Float	10	21	303
Craig to Hollis Hwy @ Hatchery - Hydaburg Rd.	11	20	0
N. Douglas Hwy @ Fish Creek Bridge - Boat Ra	12	19	192
Mitkof Hwy. @ Swan Observatory - Crystal La	13	18	197
Mitkof Hwy. @ Twin Creek Trailer Park - Falls	14	17	180
Zimovia Hwy. @ Wrangell Institute - Shoemak	15	16	328
Lemon Road (Glacier) @ DOT - Sunny Dr.	16	16	0
Haugen Dr. @ Airport - Sandy Beach	17	16	141
Nordic Dr. @ Sing Lee Alley - Ferry Term	18	15	1,051
Haines Hwy. @ Sawmill Rd - Airport	19	15	166
Haines Hwy. @ Milepost 12 - Kluckwan	20	15	132
S. Tongass Hwy @ Roosevelt - Power House S	21	15	0
Revillla Rd. @ White River Spur - Harriet Hun	22	14	0
Industrial Blvd. @ Glacier Hwy - Bentwood	23	14	0
Haines Hwy. @ Mud Bay Rd Sawmill Rd.	24	14	128
Dyea Road @ Observation Pt - Taiya River Bri	25	14	0
S. Tongass Hwy @ USCG - Gunner St.	26	13	0
Halibut Pt. Road @ Harbor Mt. Rd - Cascade C	27	13	1,325
N. Tongass Hwy @ Beechwood Dr Pond Ree	28	13	1,246
Glacier Highway - Egan @ Engineers Cutoff	29	12	234
Cordova @ Douglas Hwy Nowell Ave.	30	12	0

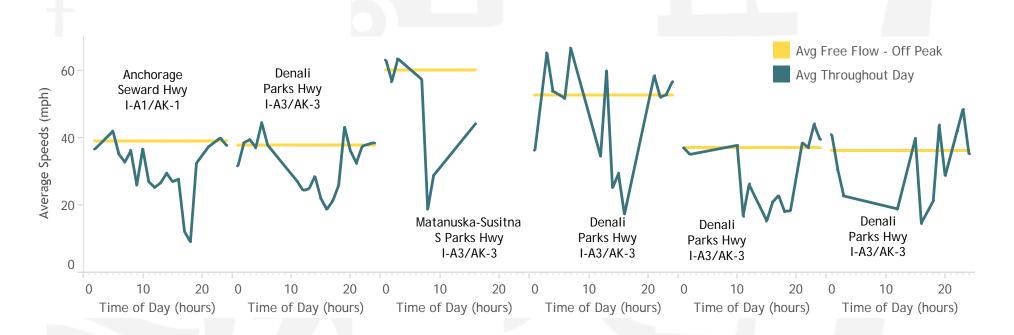


# Corridor Profiles Truck AADT (With Percentages) on Parks Highway



# FHWA National Performance Data Truck Travel Time Data from ATRI (GPS Based)

- Allows calculation of mean free-flow speeds, extent and duration of reduced speed operations
  - Example: data for month of August 2014



 Travel time data for other vehicles from HERE (formerly Nokia/Navteq), cell phone data



### **FHWA National Performance Data**

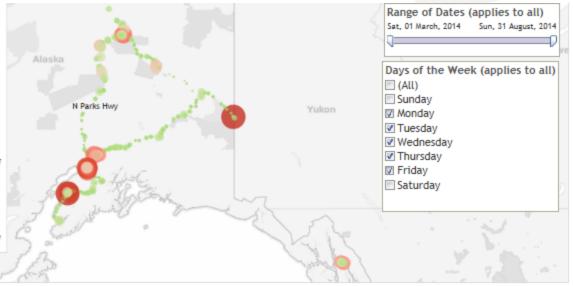
### "Travel Speed Index" Calculation

#### Planning Travel Time Indices

 80th Percentile Travel Time / 10th Percentile Travel Time

This index is one of the many measures that can be used to quantify roadway congestion. In this case it is assumed that the 10th Percentile Travel Time represents free flow conditions where no congestion is present, while the 80th Percentile Travel Time represents the amount of time that a driver should budget to be on time 80 percent of the time, if the travel times are sampled randomly. More broadly, this index provides some information on the variability of traffic congestion from the drivers point of view, allowing for the identification of critical links in the roadway network.

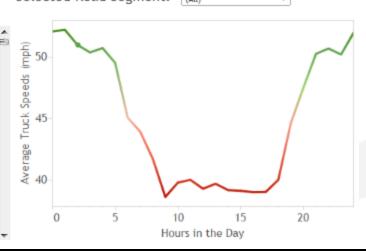
C OpenStreetMap contributors



Road Segments with the Highest Trucking Congestion

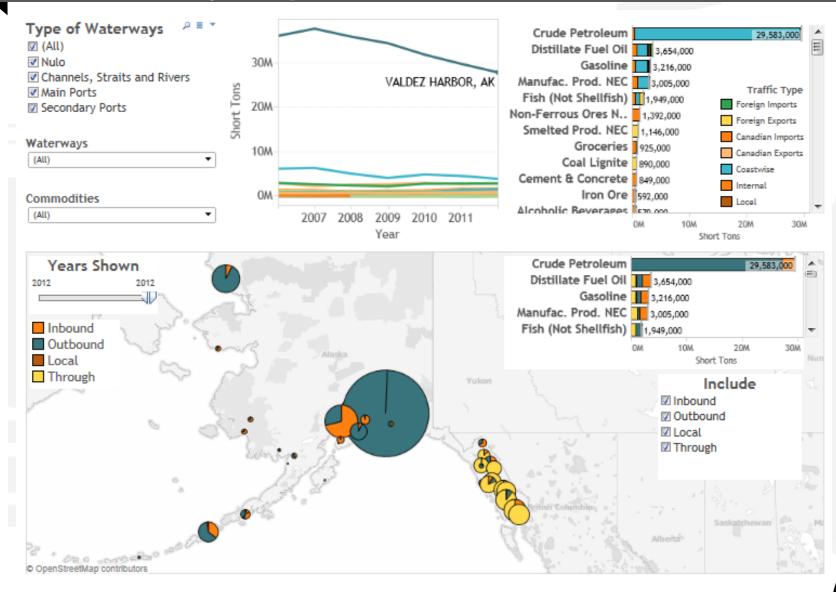
Road ID	Location	Road Name	Road Direction	Planning Travel F Time In
133P04781	Southeast Fairba	Alaska Hwy	Northbound	11.32
133P04219	Kenai Peninsula	Sterling Hwy	Northbound	11.11
133N04244	Anchorage	C St	Southbound	8.80
133N04222	Kenai Peninsula	Sterling Hwy	Southbound	8.38
133P04162	Anchorage	6th Ave	Eastbound	7.76
133P04107	Anchorage	Seward Hwy	Northbound	7.27
133P04321	Anchorage	Old Seward Hwy	Northbound	7.11
133P04399	Anchorage	Benson Blvd	Eastbound	6.78
133N04261	Anchorage	Lake Otis Pky	Southbound	6.59
133N04473	Matanuska-Susitna	E Parks Hwy	Southbound	6.40
133P04612	Fairbanks North	Richardson Hwy/Ste	Northbound	6.29
133N04364	Anchorage	Tudor Rd	Westbound	5.88
133N04639	Fairbanks North	Johansen Expy	Westbound	5.41
133N04127	Anchorage	Minnesota Dr	Southbound	5.34

Average Travel Speed Throughout the Day in Selected Road Segment: (All)

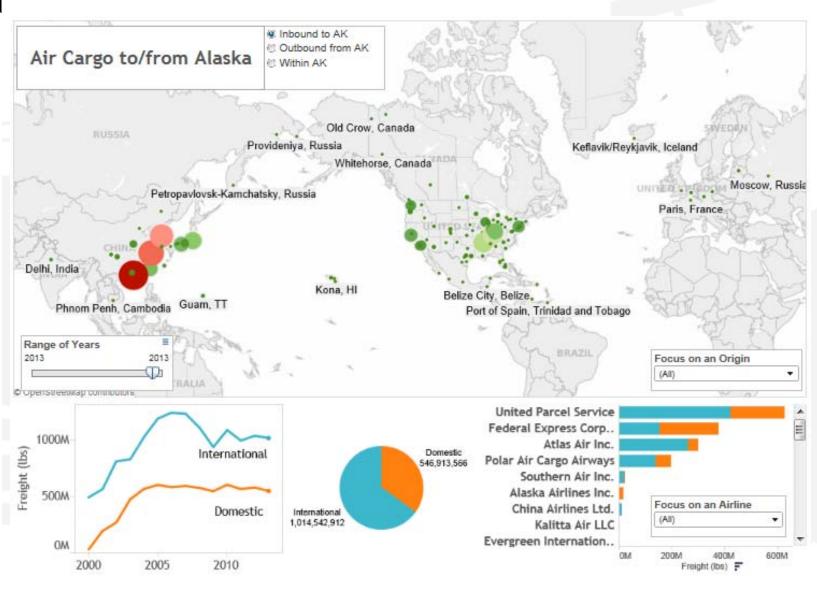




# Alaska's Cargo Ports US Army Corps' Waterborne Commerce of the US



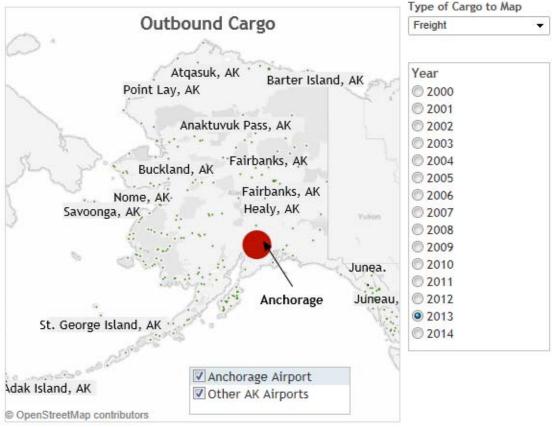
# Alaska's Air Cargo Services FAA T-100 Report Series



# Alaska's Domestic Cargo Airports FAA T-100 Report Series

### Cargo at Airports in Alaska







# Freight Rail Draft Alaska State Rail Plan



#### Barge/Interline Services

Alaska Rail Marine (ARM) moves railcar shipments to/from Alaska via Seattle, interchanging with Lower 48 railroads. Containers arriving by ARM barge move from Whittier to Anchorage, Fairbanks, or other destinations by rail. Canadian National Railway barges move railcar shipments to/from Whittier via Prince Rupert, interchanging with Canadian National Railway.

#### Coal

Coal from Usibelli Coal Mine in Healy moves to Fairbanks, where is it used for power generation, and to Seward, where it is shipped to overseas customers.

#### Grave

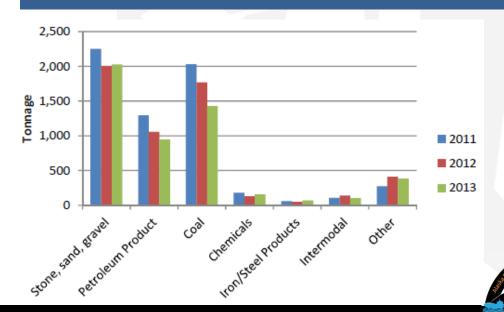
Seasonal (April-October) aggregate products move from the Matanuska-Susitna Valley to Anchorage.

#### Trailers/Containers on Flat Cars (TOFC/COFC)

TOFC/COFC move north and south between Seward, Whittier, Anchorage, and Fairbanks.

#### Miscellaneous/In-State Local

Other freight includes specialty movements of very large or oddly shaped equipment and materials as well as in-state shipments of cement, scrap metal, military equipment, and pipe.



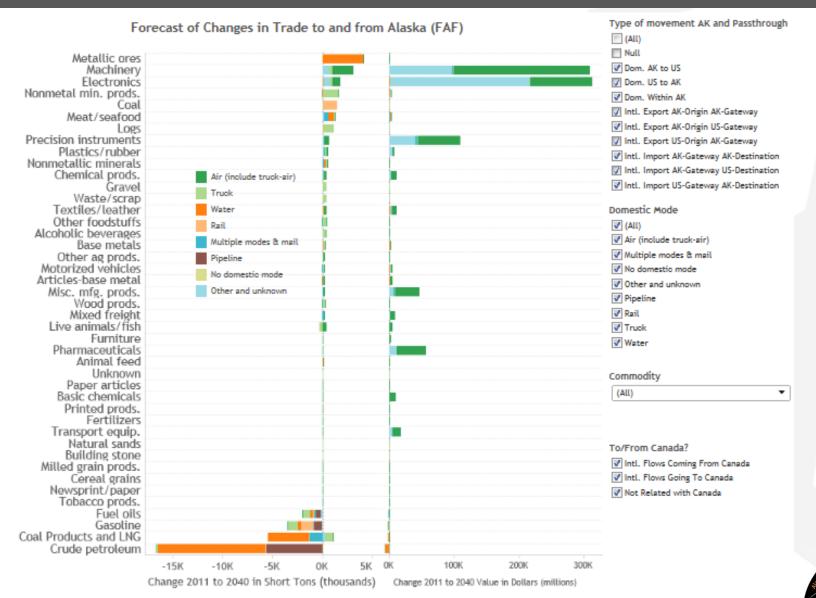
# Base Freight Forecast, 2011 to 2040 Summary

- Base forecast is for lower tonnage
  - Strong growth in electronics and machinery
    - Both pass-through and in-state, by air
  - Strong growth in metallic ores
    - Export, by water
  - Some growth in misc. manufactured goods, transportation equipment, pharmaceuticals, other consumer goods
  - Little change in coal, gasoline, fish
  - Decline in "coal n.e.c." (includes LNG and related)
  - Significant decline in crude petroleum
    - Reduced domestic movements by pipeline and water



# Base Freight Forecast, 2011 to 2040

### Dashboard



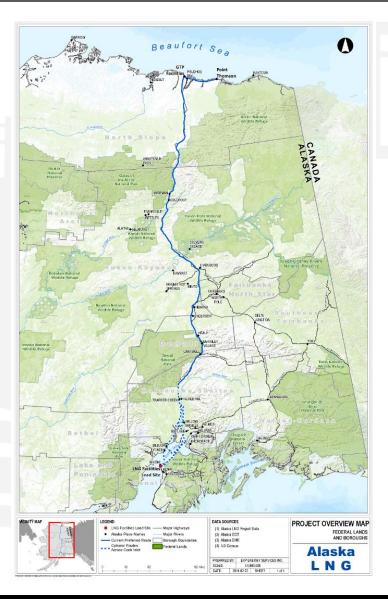
## **Risk Factors Affecting Base Forecast**

	Risk Statement	Consequence for transportation plan to consider
Demand	Increased resource development in the state	An increase in resource development could result in increased unplanned maintenance and operating expenditure on the system in areas of development and new capital improvements in response
De	Decreased resource development in the state	Freight volumes and state revenues decline as forecast, travel demand declines
Climate Change	Changing climate patterns and extreme weather events, including melting and thawing of permafrost, are becoming more prominent in some parts of the state	Increased vulnerabilities that will put the state's transportation infrastructure at risk if not addressed; potential increase in cost of maintenance and reconstruction
Climat	Thinning and retreating sea ice in the Arctic Ocean opens up the potential for new growth to materialize and infrastructure and resource development	Increased Arctic traffic, new federal investment in facilities and new opportunities for Alaska and travel demands for DOT&PF to plan for and safety concerns



## Possible Forecast Adjustments

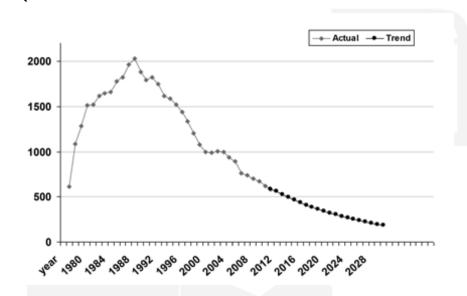
### Alaska LNG Export Project



- ExxonMobil, ConocoPhillips, BP,
   TransCanada and the state of Alaska
- \$45 billion to \$65 billion (2012 dollars) for a processing plant, an 800-mile pipeline from the North Slope to the liquefaction plant; and an LNG plant, storage and marine shipping terminal at Nikiski
- Pipeline to carry 3 billion to 3.5 billion cubic feet of natural gas per day
- Plant would have the capacity to make up to 20 million metric tons a year of LNG, processing 2.5 billion cubic feet a day of gas.
- Recent filings to FERC, expects to complete pre-engineering and design in 2015 or 2016
- Accept as proposed?

## Possible Forecast Adjustments

### Crude Petroleum and Natural Gas



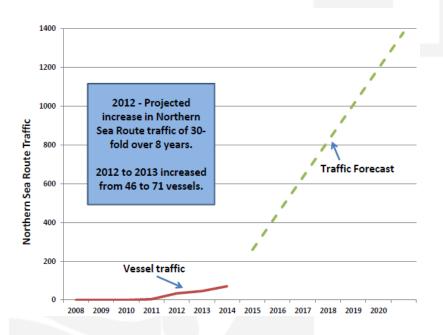
- TAPS Forecast Volumes (000 barrels/day)
  - 5% per year decline worse than FAF-3
  - US EIA scenarios anywhere from maintain current production to zero production

- What to assume (none, some, all, range) for:
  - Stabilized or increased production from North Slope via TAPS
  - Point Thompson, North Slope Shale, North Slope Foothills
  - Umiat / Foothills West production
  - Production of Chukchi and Beaufort Sea reserves
  - Natural Petroleum Reserve-Alaska and ANWR
  - In-state refining after Flint Hills

# Possible Forecast Adjustments *Mining*

- Volumes may be within the envelope of the forecast; if not, we propose to adjust
- What to assume (none, some, all, range) regarding:
  - Coal production
    - Usibelli, Susitna River Valley, North Slope
  - Copper and other mineral prospects
    - Red Dog Mine and Graphite One
    - Fairbanks/Livengood
    - Donlin Creek Gold
    - Ambler Mining District
    - Pebble Mine prospect

# Possible Forecast Adjustments Climate Change



### What to assume for:

- Arctic ports
  - O-D traffic (related to energy, mining, and local service)
  - Transload / "hub and spoke" service volumes – volume forecast available?
- Modal diversion effects
  - Reduced reliability of pavement impacts all modes, but <u>networks</u> probably more impacted than <u>facilities</u>
  - Would any modal shifts be temporary or systemic?



**Questions/Comments?** 

## Workshop #1

### Alaska Freight Network and Performance Measures

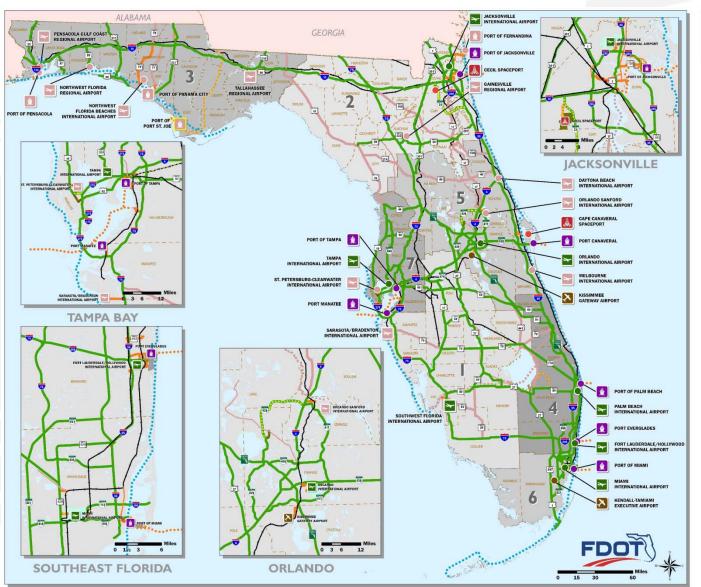
- Purpose: <u>discuss and</u> <u>receive input on</u> preliminary ideas to:
  - Define an Alaska Freight Network
  - Establish FreightPerformance Measures



## Action Item: Alaska Freight Network

- Action recommendations discussed at FAC #2
- What do you use it for?
  - Response to federal effort to define the Alaska component of the national freight network; prepare for possible freight program funding in reauthorization
  - Prioritize improvements supporting freight
  - Structure freight performance measurement
  - Tell the story

# Action Item: Freight Network Example – Florida Strategic Intermodal System





http://www.dot.state.fl.us 850-414-4900

### Action Item: Alaska Freight Network Key Questions

- What does it include?
  - All modes, like the Florida SIS?
    - SIS provides category funding for all modes
    - Florida tracks performance across all modes
  - Truck system only
    - May be more appropriate where funding sources and performance metrics are not applied across multiple modes
    - Can include truck routes and intermodal facility connectors the intermodal facilities become part of the map (by virtue of the connectors), but without actual or implied funding and performance measurement responsibilities
- Thoughts?

# Action Item: Alaska Freight Network Defining a Truck Freight Network

 Possible approach builds on Alaska's response to USDOT's proposed National Freight Network Can Alean

- Add established freight corridors
  - Steese Highway, Dalton Highway, North Slope Haul Road
  - Richardson Highway to Valdez
- Add STRAHNET routes
- Add connectors to intermodal freight facilities, resource extraction areas and other major freight generators
- Integrate critical rural freight connectors

# Action Item: Alaska Freight Network Defining and Updating Using Performance Measures

### Examples:

- Truck corridors and segments with
  - Truck AADT > 500 per day
  - Truck percentage > 15%
  - Truck travel speed index > 3.0
- Connectors to ports, airports, rail terminals with
  - Tonnage or value > 1% of modal system tonnage or value
- Connectors to freight generators with
  - Truck generation meeting the criteria above
  - Modal system tonnage or value meeting the criteria above
- Next steps
  - Develop prototype based on initial criteria
  - Finalize as part of Freight Element

## Action Item: Freight Performance Measures

- Why?
  - Called for in MAP-21
  - Sound basis for planning, investment, and management
  - Telling the story
- What can we measure?
  - System performance
  - User experience
  - External factors and drivers
  - Organizational metrics
- Guideposts in developing freight performance measures
  - Focus on measuring progress toward LRTP goals
  - Minimize cost and effort to acquire and maintain data
    - Start with the achievable, work toward the perfect
    - Suggest truck measures only for now, consistent with MAP-21 and AASHTO guidance

# Action Item: Freight Performance Measures Are These the Right Measures?

Туре	Possible Measure	Availability of Data
System Measures	Route miles with a specified AADT Route miles with a specified Truck Share of AADT Truck Freight Network attributes  Route miles  Number of intermodal facilities linked to  Truck crashes  Closures (miles x hours)  Pavement and bridge condition  Number of restricted weight bridges	Can be calculated from available data
User Measures	Percent of population dependent on single mode Percent of population reached by TFN TFN miles above a specified Travel Speed Index  Annual Hours of Truck Delay (AASHTO SCOPM) Truck Travel Time Reliability (AASHTO SCOPM)	Can be calculated from available data  May need additional data
External and Organizational Measures	Truck registrations Truck fuel tax receipts (diesel/LNG/CNG) Number of oversize/overweight permits issued Number of hazmat permits issued Citations issued	Can be calculated from available data
	Truck fuel efficiency and related emissions	May need additional data

# Workshop #2 Plan Strategies, Policies, Actions

Purpose: <u>discuss and</u>
 <u>receive input on</u>
 preliminary plan
 strategies, and actions
 related to freight

### Process:

- Distribute and review draft
   Plan Strategies, Policies,
   and Actions for the LRTP
- Discuss



# Plan Strategies, Policies, Actions Focus on Freight Items

Transportation Stakeholders Group (TSG) and Freight Advisory Committee (FAC) Meeting 3

#### PLAN AND GOALS

Alaska's plan/goals for the transportation system are to:

- 1. Deliver the 10 Year Capital Improvement Plan
- 2. Proactively monitor evolving economic projects and align capital investments to serve them
- Preserve the Alaska Transportation system to meet MAP-21 Performance Targets (once the targets are formalized, focusing on safety, pavement and bridge condition)
- Prioritize modernization investments and new construction based on their impact on transportation system performance
- Address Anchorage/region mobility through MPO and regional plans with emphasis on modernization to improve capacity and reduce safety risks
- Address safety and security risks by improving transportation system resilience and redundancy
- 7. Manage and operate the system to improve operational efficiency and reduce safety risk

We will incorporate livability, community and environmental concerns in all our decisions, and strive towards more openness and accountability of the transportation system and its performance.

#### STRATEGIES

Our three strategies to implement the plan and move towards our goals are:

- 1. Align outcomes, plans and projects based on performance-based resource allocation
- 2. Manage the system to increase performance and reduce risk
- 3. Increase revenue and provide accountability

#### POLICY AND ACTION AREAS

New Facilities	Modernization	System Preservation	System Management and Operations
Economic Development	Safety and Security	Livability, Community and Environment	Good Government

## **Steps to Complete**

- Freight Element
  - Data analyses have been documented
  - Finalize policy-related analyses
  - Integrate modal system plans and capital programs
    - DOT&PF, port/rail/airport/pipeline, MPOs, private sector
  - Ensure MAP-21 compliance
- Coordinate with LRTP preparation
  - Draft plan release in early 2015





## Wrap Up



### **Thank You!**

Website: <a href="https://www.dot.alaska.gov/lrtpplanupdate">www.dot.alaska.gov/lrtpplanupdate</a>

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